Printing date 01/24/2023 Reviewed on 01/24/2023

1 Identification

· Product identifier

· Trade name: Sterile Collodion (Parlodion) 2% in Amyl Acetate

· Article number: 12620-10, 12620-55, 12620-50

· Application of the substance / the mixture Laboratory chemicals

· Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

Electron Microscopy Sciences

1560 Industry Road

USA-Hatfield, PA 19440

Tel: 215-412-8400 Fax: 215-412-8450

email: sgkcck@aol.com www.emsdiasum.com

· Information department: Product safety department

· Emergency telephone number:

ChemTrec 1-800-424-9300 Contract CCN7661

1-703-527-3887

2 Hazard(s) identification

· Classification of the substance or mixture



GHS02 Flame

Flammable Liquids 3 H226 Flammable liquid and vapor.

- · Label elements
- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



GHS02

- · Signal word Warning
- · Hazard statements

Flammable liquid and vapor.

· Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Keep container tightly closed.

Ground/bond container and receiving equipment.

 $Use\ explosion-proof\ electrical/ventilating/lighting/equipment.$

Use only non-sparking tools.

Take precautionary measures against static discharge.

Wear protective gloves/protective clothing/eye protection/face protection.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

In case of fire: Use CO2, powder or water spray to extinguish.

Store in a well-ventilated place. Keep cool.

Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 2)

(Contd. of page 1)

Safety Data Sheet acc. to OSHA HCS

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Trade name: Sterile Collodion (Parlodion) 2% in Amyl Acetate

· Classification system:

· NFPA ratings (scale 0 - 4)



Health = 0 Fire = 3Reactivity = 0

· HMIS-ratings (scale 0 - 4)



- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable. · **vPvB**: Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.
- · Dangerous components:

628-63-7 AMYL ACETATE, REAGENT

>50-*≤*100%

4 First-aid measures

- · Description of first aid measures
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Generally the product does not irritate the skin.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If symptoms persist consult doctor.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents: CO2, sand, extinguishing powder. Do not use water.
- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away.
- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.

(Contd. on page 3)

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Trade name: Sterile Collodion (Parlodion) 2% in Amyl Acetate

(Contd. of page 2)

· Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Do not flush with water or aqueous cleansing agents

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

· Protective Action Criteria for Chemicals

· PAC-1:	
628-63-7 AMYL ACETATE, REAGENT	100 ppm
· PAC-2:	
628-63-7 AMYL ACETATE, REAGENT	670 ppm
· PAC-3:	
628-63-7 AMYL ACETATE, REAGENT	4000* ppm

7 Handling and storage

- · Handling:
- · Precautions for safe handling No special precautions are necessary if used correctly.
- · Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect from heat.

Protect against electrostatic charges.

- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:

Keep receptacle tightly sealed.

Protect from heat and direct sunlight.

· Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

628-63-7 AMYL ACETATE, REAGENT

PEL Long-term value: 525 mg/m³, 100 ppm REL Long-term value: 525 mg/m³, 100 ppm

TLV Short-term value: 100 ppm

Long-term value: 50 ppm

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures: Wash hands before breaks and at the end of work.
- · Breathing equipment: Not required.

(Contd. on page 4)

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(Contd. of page 3)

· Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

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· General Information

· Appearance:

Form:
Color:
Colorless
Odor:
Fruit-like
Not determined.

pH-value:
Not determined.

· Change in condition

Melting point/Melting range: -70.8 °C (-95.4 °F) Boiling point/Boiling range: 149 °C (300.2 °F)

• Flash point: $23 \, ^{\circ}C \, (73.4 \, ^{\circ}F)$

· Flammability (solid, gaseous): Flammable.

• Ignition temperature: $360 \, ^{\circ}C \, (680 \, ^{\circ}F)$

· Decomposition temperature: Not determined.

· Auto igniting: Product is not selfigniting.

· Danger of explosion: Product is not explosive. However, formation of explosive air/vapor

mixtures are possible.

· Explosion limits:

 Lower:
 1.1 Vol %

 Upper:
 7.5 Vol %

· Vapor pressure at 20 °C (68 °F): 5.3 hPa (4 mm Hg)

• Density at 20 °C (68 °F): 0.8752 g/cm³ (7.30354 lbs/gal)

• Relative density
• Vapor density

· Evaporation rate Not determined.

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Trade name: Sterile Collodion (Parlodion) 2% in Amyl Acetate

		(Contd. of page
· Solubility in / Miscibility with Water at 20 °C (68 °F):	1.8 g/l	
· , ,		
· Partition coefficient (n-octanol/wo	ter): Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
· Solvent content:		
Organic solvents:	97.0 %	
VOC content:	97.00 %	
	970.0 g/l / 8.10 lb/gal	
Solids content:	0.0 %	
· Other information	No further relevant information available.	

10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: No irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:
- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety Health Administration)

None of the ingredients is listed.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.

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Trade name: Sterile Collodion (Parlodion) 2% in Amyl Acetate

(Contd. of page 5)

- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

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· DOT, ADR, IMDG, IATA UN1104

· UN proper shipping name

 $\cdot DOT$

RQ Amyl acetates 1104 AMYL ACETATES

· IMDG, IATA

AMYL ACETATES

- · Transport hazard class(es)
- $\cdot DOT$

 $\cdot ADR$



· Class 3 Flammable liquids

· Label

· ADR, IMDG, IATA



· Class 3 Flammable liquids

· Label

· Packing group

· DOT, ADR, IMDG, IATA III

· Environmental hazards: Not applicable.

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Trade name: Sterile Collodion (Parlodion) 2% in Amyl Acetate

	(Contd. of pag
· Special precautions for user	Warning: Flammable liquids
· Hazard identification number (Kemler code):	: 30
· EMS Number:	F-E
· Stowage Category	A
· Transport in bulk according to Annex II of	
MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· DOT	
· Quantity limitations	On passenger aircraft/rail: 60 L
	On cargo aircraft only: 220 L
· Hazardous substance:	5000 lbs, 2270 kg
· <i>ADR</i>	
· Excepted quantities (EQ)	Code: E1
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 ml
· IMDG	
· Limited quantities (LQ)	5L
\cdot Excepted quantities (\widetilde{EQ})	Code: E1
-	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 1104 AMYL ACETATES, 3, III

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.
- Sara
- · Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

All components have the value ACTIVE.

· Hazardous Air Pollutants

None of the ingredients is listed.

- · Proposition 65
- · Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

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Trade name: Sterile Collodion (Parlodion) 2% in Amyl Acetate

(Contd. of page 7)

· Carcinogenic categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



- · Signal word Warning
- · Hazard statements

Flammable liquid and vapor.

· Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting/equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Wear protective gloves/protective clothing/eye protection/face protection.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

In case of fire: Use CO2, powder or water spray to extinguish.

Store in a well-ventilated place. Keep cool.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Contact:
- · Date of preparation / last revision 01/24/2023
- · Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety Health

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Trade name: Sterile Collodion (Parlodion) 2% in Amyl Acetate

(Contd. of page 8)

TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit

REL: Recommended Exposure Limit Flammable Liquids 3: Flammable liquids – Category 3

HC